**Average annual & monthly sunshine duration**

[About sunshine duration maps](http://www.bom.gov.au/jsp/ncc/climate_averages/sunshine-hours/IDCsungrids.jsp)

References & Guides

* [Additional climate products](http://www.bom.gov.au/climate/data-services/index.shtml)
* [Climate Data Online](http://www.bom.gov.au/climate/data/index.shtml)
* [Climate data FAQ](http://www.bom.gov.au/climate/how/faq-data.shtml)
* [Climate education](http://www.bom.gov.au/lam/climate/index.htm)

**Contents**

* [At a glance](http://www.bom.gov.au/jsp/ncc/climate_averages/sunshine-hours/index.jsp#glance)
* [View the maps](http://www.bom.gov.au/jsp/ncc/climate_averages/sunshine-hours/index.jsp#maps)
* [What do the maps show?](http://www.bom.gov.au/jsp/ncc/climate_averages/sunshine-hours/index.jsp#what)
* [Further information](http://www.bom.gov.au/jsp/ncc/climate_averages/sunshine-hours/index.jsp#info)

**At a glance**

These sunshine duration maps show the average annual and average monthly distribution of sunshine duration across Australia.

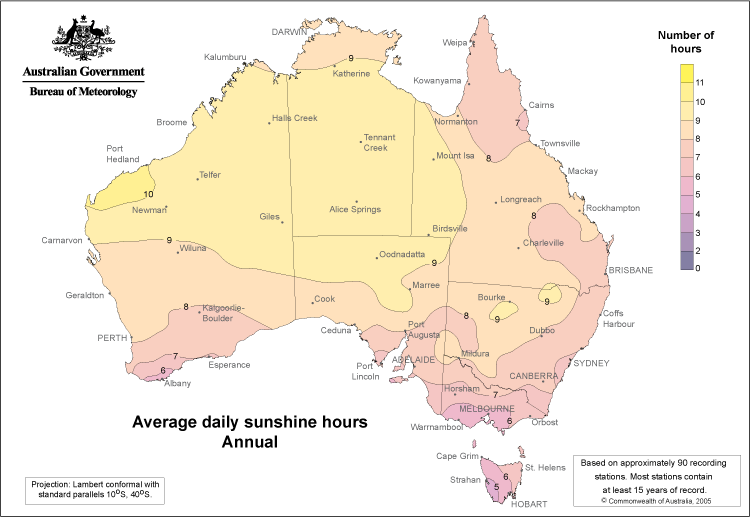
**View the maps**

Top of Form

Controls

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Period |  | No period available for the selected map [Following](javascript:donothing();) |  | Download: | [Grid](http://www.bom.gov.au/web01/ncc/www/climatology/sunshine/sunan.zip) | Current view Australia |
|  |  |  |  |  |  |  |

Bottom of Form



Product Code:   IDCJCM0013

[Creative Commons By Attribution logo](http://creativecommons.org/licenses/by/3.0/au/) Unless otherwise noted, all maps and graphs in this page are licensed under the [Creative Commons Attribution Australia Licence](http://creativecommons.org/licenses/by/3.0/au/)

**What do the maps show?**

These maps show the daily average number of bright sunshine hours across Australia for each month and the year.

Average annual sunshine duration is calculated by adding daily sunshine totals over a specified period (all available data between 1900 to 2003 with at least 15 years of records at each station) and dividing by the number of years in that period (this varies per station). Similarly, average monthly sunshine is calculated by adding monthly sunshine totals and dividing by the number of years in the specified period.

Sunshine hours are obtained from the [Campbell-Stokes sunshine recorder](http://www.bom.gov.au/climate/cdo/about/definitionsother.shtml), which uses a glass sphere to focus the sun's rays onto a calibrated paper card. When the sky is clear the focused rays burn a trace on the card, which is then used to determine the daily length of 'bright sunshine'.

The **annual sunshine duration** map shows an area of higher sunshine duration across central Australia, with lower sunshine duration in coastal areas in the south. Areas of inland Australia have a lower moisture content in the air (see [relative humidity maps](http://www.bom.gov.au/jsp/ncc/climate_averages/relative-humidity/index.jsp)) and therefore less cloud cover. This reduced cloudiness directly influences the number of sunshine hours. Coastal areas have a higher moisture content, greater and more frequent cloud cover and therefore fewer sunshine hours.

Seasonal sunshine duration maps (northern wet season: October to April and northern dry season: May to September) show the difference between these two distinct seasons. During the wet season, there is a decrease in sunshine duration in northern Australia as this area comes under the influence of the [monsoon](http://www.bom.gov.au/watl/about-weather-and-climate/australian-climate-influences.shtml?bookmark=monsoon)(increased cloudiness). At the same time, the [sub-tropical ridge](http://www.bom.gov.au/watl/about-weather-and-climate/australian-climate-influences.shtml?bookmark=stridge) moves south and southern Australia experiences drier, less cloudy conditions with an associated increase in sunshine duration. Conversely, during the northern dry season there is an increase in sunshine hours in northern Australia as the [sub-tropical ridge](http://www.bom.gov.au/watl/about-weather-and-climate/australian-climate-influences.shtml?bookmark=stridge) moves north. As the ridge moves north, southern Australia becomes more affected by [frontal systems](http://www.bom.gov.au/watl/about-weather-and-climate/australian-climate-influences.shtml?bookmark=fronts). These bring an increase in rainfall and cloud cover, and an associated decrease in sunshine hours.